

Patent Claims

1. A motor housing for an electric motor having a housing shell (10) which encloses a space (52) to accommodate the electric motor, and a flexible partition (50) in the housing shell (10) which is inserted between the housing shell (10) and the housing cover (12) and which defines a pressure equalizing cavity (54) between the housing cover (12) and the flexible partition (50), whereby the pressure equalizing cavity (54) is connected to the outside environment via the housing cover (12).
2. A motor housing according to claim 1, characterized in that the flexible partition (50) is formed by means of a membrane.
3. A motor housing according to claim 1, characterized in that at least two openings (56, 58) are formed in the housing cover (12) to connect the pressure equalizing cavity (54) to the outside environment.
4. A motor housing according to claim 3, characterized in that the openings (56, 58) are formed by means of grooves or holes in the housing cover.
5. A motor housing according to claim 1, characterized in that the flexible partition (50) forms a seal between the housing shell (10) and the housing cover (12).
6. A motor housing according to claim 1, characterized in that the housing cover (12) features some means (60) of fixing and guiding the flexible partition (50) when the partition (50) is distorted.
7. A motor housing according to claim 1, characterized in that a cable duct (36) is provided between the housing shell (10) and the housing cover (12) which holds leads (38, 40) for the purpose of connecting the electric motor and that the flexible partition (50) forms a seal between the cable duct (36) and the housing shell (10) and/or the housing cover (12).
8. A motor housing according to claim 1, characterized in that the flexible partition comprises a semi-permeable membrane.

9. An electric motor having a stator (16) and a rotor (22) which is enclosed in a motor housing according to claim 1.